UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO.   | FILING DATE                       | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-----------------------------------|----------------------|---------------------|------------------|
| 10/752,434  | 01/06/2004                        | Yeshwanth Narendar   | S1432-700819        | 3742             |
| •   | 7590 11/21/2007<br>JDO & ANASTASI | EXAMINER             |                     |                  |
| RIVERFRONT OFFICE<br>ONE MAIN STREET, ELEVENTH FLOOR<br>CAMBRIDGE, MA 02142 |                                   |                      | GROUP, KARL E       |                  |
|   |                                   |                      | ART UNIT            | PAPER NUMBER     |
|   |                                   |                      | 1793                |                  |
|   |                                   |                      |                     |                  |
|   |                                   |                      | NOTIFICATION DATE   | DELIVERY MODE    |
|   |                                   |                      | 11/21/2007          | ELECTRONIC       |

## Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@ll-a.com gengelson@ll-a.com

| •  | Application No.  | Applicant(s)  |  |  |
|--|--|---|--|--|
|  | 10/752,434   | NARENDAR ET AL.                                     |  |  |
| Office Action Summary  | Examiner   | Art Unit  |  |  |
|  | Karl E. Group  | 1793  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply   | ears on the cover sheet with the c   | orrespondence address                               |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period w  Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).   | ATE OF THIS COMMUNICATION<br>36(a). In no event, however, may a reply be tim<br>will apply and will expire SIX (6) MONTHS from<br>cause the application to become ABANDONE |   |  |  |
| Status   |  |   |  |  |
| <ul> <li>1) Responsive to communication(s) filed on 31 Oc</li> <li>2a) This action is FINAL. 2b) This</li> <li>3) Since this application is in condition for allowar closed in accordance with the practice under E</li> </ul>   | action is non-final.<br>nce except for formal matters, pro   |   |  |  |
| Disposition of Claims  |  |   |  |  |
| 4)  Claim(s) 14,23,30,32-35 and 42-58 is/are pend 4a) Of the above claim(s) 42-58 is/are withdraw 5)  Claim(s) is/are allowed. 6)  Claim(s) 14,23,30,32-35 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/or Application Papers   | n from consideration.  |   |  |  |
| 9) The specification is objected to by the Examine   |  |   |  |  |
| 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the confidence of th | epted or b) objected to by the Edrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj   | e 37 CFR 1.85(a).<br>ected to. See 37 CFR 1.121(d). |  |  |
| Priority under 35 U.S.C. § 119   |  |   |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some color None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>  |  |   |  |  |
| Attachment(s)  |  |   |  |  |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date   | 4) Interview Summary (Paper No(s)/Mail Da 5) Notice of Informal Pa   | te  |  |  |

10/752,434 Art Unit: 1793

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10-31-07 has been entered.

## Election/Restrictions

2. Newly submitted claims 42-58 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The originally elected species is SiC articles having no specific structure. Claims 51 and 54 are evidence claims that the wafer support claims are properly restricted under a combination/subcombination restriction in that the combination does not require the particulars of the subcombination. It is not that these claims do not require SiC the elected specie. Applicants also appear to be attempting to incorporate an invention that was originally filed in 10/752434 and abandoned. See 35 USC 102 (c).

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 42-58 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

10/752,434 Art Unit: 1793

## Claim Rejections - 35 USC § 102 and 103

- 3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 4. Claims 14,23,33-35 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Japanese document 10-228974, for reasons of record.
- 5. Claims 14,23,33,34 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Japanese document 07-328360, for reasons of record.

With respect to claim 14, applicants argue the Japanese documents fails to teach recrystallized SiC having a pore size of at least 15 microns and impurities of [iron] copper, nickel, chromium and calcium less than 400 ppm. JP 10-228974 clearly teaches a pore size of 15-40 microns. JP 07-328360 teaches a pore size of 30 microns.

As to the impurity level applicants have not shown by way of tangible evidence that the total amount of impurity (Fe, CU, Ni, Cr and Ca) would be expected to be greater than 400 ppm in the Japanese documents.

With respect to claim 15, applicants have not shown by way of tangible evidence that the content of Ni in the Japanese documents would be expected to be greater than 5 ppm. It is specifically noted that nickel is not added in the Japanese documents and therefor it would be expected that it is not present.

6. Claims 14,23,30,32-35 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Dubots et al (6,162,543), for

reasons of record. It is greed that Dubots teaches siliconizing the SiC body however the rejection is made over the intermediate article of Dubots et al before it is siliconized. The fact that the intermediate SiC of Dubots et al is intend ended to be siliconized does not patentably distinguish the instant claims. It is also noted that only claims 30 and 32 are drawn to a "wafer boat", claims 14,23,24,33-35 are directed to an article, which clearly does not distinguish the intermediate of Dubots et al.

With respect to claim 330, applicants argue that Dubots et al fail to teach an active impurity content of less that 1 ppm of *one of Fe, Cu, Ni, Cr and Ca*. Column 7, lines 33-37 disclosed an iron content of less than 1 ppm, preferably less than .5 ppm.

With respect to claim 33, applicants argue that Dubots et al fail to teach a nickel content less than 5 ppm. Dubots et al teach a total metal impurity content of less than 10 ppm, preferably less than 5 ppm, Column 7, lines 28-33.

It is further argued that the intermediate of Dubots cannot be considered a wafer boat because it contains impurities that vaporize during siliconizing. This is not persuasive because Dubots et al clearly teach that the SIC body before it is siliconized contains less than 10 ppm total metal impurities and .1 ppm iron, see column 5, lines 19-21. This is not the siliconized article.

## Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10/752,434

Art Unit: 1793

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl E. Group whose telephone number is 571-272-1368. The examiner can normally be reached on M-F (6:30-4:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Karl E Group Primary Examiner

Art Unit 1793

Keg 11-14-07